Management of confusion in elderly persons

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Confusional states in the elderly are not uncommon and demand a high level of diagnostic and therapeutic skills in the physician. An immediate requirement is to provide protection and care while the cause is being elucidated. Tranquillizing medication is useful but the dosage must be both sufficient for the patient to gain control and monitored to prevent overdosage. Confusion may be due to disorder in various body systems with effects on the brain, or to a primary brain disorder. Careful evaluation of general health and also of cognitive, affective and social factors is necessary to clarify diagnosis and management.

La manifestation d'un état confusionel chez une personne âgée peut poser pour le médecin un défi indéniable et requérit une compétence diagnostique et thérapeutique du plus haut degré. Il lui faut tout d'abord trouver les moyens de protéger le patient mais en même temps à ne pas ou l'isoler ou l'assombrir davantage. Les tranquillisants sont utiles mais dangereux si la posologie n'est pas soigneusement contrôlée. Les causes de l'état sont nombreuses et demandent un examen de tous les systèmes du corps. Dans l'évaluation du fonctionnement du cerveau on doit considérer les aspects émotifs et cognitifs. Il faut aussi gagner une connaissance de la personne comme individu et dans son milieu social pour établir un diagnostic complet sur lequel peut être bâti un traitement efficace.

There can be few conditions that demand more of the physician than confusional states in old people. The physician must have great diagnostic acumen, major treatment and management skills, and both patience and diplomacy.

An acute confusional state may occur in a person who was previously functioning normally and may be reversible when and if the cause is identified. It is vital that the age of the person not prejudice the physician to believe that therapy is useless and that the condition is due to old age itself. Although the manifestation of the disorder is largely behavioural, the underlying condition is almost invariably an organic disease such as pneumonia, renal infection, heart failure, metabolic disorder, cerebrovascular accident or head trauma, or toxicity from drugs or alcohol.[1] The person may be delirious or stuporous and is usually disoriented and restless, and sometimes aggressive. Memory is impaired and there may be hallucinations and delusions, which make management very difficult.

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Initial steps

Clearly the person must be protected from injuring himself or others and from physical exhaustion. The first approach should be to mobilize the person's own control mechanisms if possible. Anxiety can be reduced by reassuring calm remarks and gestures, particularly if someone is present whom the patient recognizes as a trusted relative or as a competent health professional. The risk of exhaustion is especially important in an old person, and "talking him down" may enable transfer to hospital and treatment to be started without the necessity of physical restraint or force. It may be necessary to give tranquillizing medication intramuscularly to gain control of anxiety and aggressiveness. The dose should be based on the person's size and, if the medication was used before, the person's previous reaction to the drug. The physician should use a drug he or she is familiar with and has confidence in. However, individual patients react differently: the dose chosen may be insufficient, so that the drug must be given again, or the agent may render the patient totally unconscious and hypotensive.[2] The patient must be kept under constant observation.

During the period when the underlying cause is being investigated and treatment initiated the person may continue to be disturbed and restless or noisy, especially at night when it is dark, staff are fewer in number and he may wonder where he is. The person should be observed frequently and reassured. He should be in a room near the nursing personnel and his mattress may need to be on the floor to prevent his falling out of bed. If he is in a bed with the sides up he may climb over and fall; if the sides are down he may roll out unless a restraint belt is used. An alternative is to sit him in a deep chair that is difficult to get out of, and to put a table in front as a form of restraint and for him to rest on. During the day he may be walked or allowed to walk if wandering away is not too likely. He should be sat out of bed in a chair with a table in front or in a geriatric chair, which has a tray to prevent standing or sliding. A lap tie can be used instead but must rest across the thighs and be tied low on the back legs if the patient is not to slide under it.

All staff, including radiology and laboratory technicians, must try to understand the patient's questions and answer calmly and simply. The patient with serious underlying disease requires the investigative and treatment resources of a general hospital and should not be transferred to a psychiatric hospital only because he manifests a behavioural disorder. The mortality from acute confusional states can be high. However, the staff of the general hospital must be trained to manage such patients and to appreciate their needs.

A major tranquillizer may have to be given during the first few days and the physician should choose one he is familiar with. A small dose should be given initially to test the patient's responsiveness, then the dose should be increased until the desired control is obtained without excessive undesirable side effects. Close attention must be paid to determine what this dose is for the individual patient. The patient must be responsive during the day to take nourishment and cooperate in examinations, and because there are larger numbers of staff during the day and other patients are awake, some disturbed behaviour may be tolerable. Such behaviour at night is much less tolerable. Therefore tranquillizing medications should not be given *tid,* as is so often done, but rather in the early evening and perhaps again in several hours if necessary. Considerable sedative effect, a degree of hypotension and possibly some urinary retention at night are acceptable. By morning the patient is beginning to waken and may be moderately cooperative without further medication until evening. The long-term antipsychotic effect of the drug may not be necessary and the side effects of rigidity and akathisia may not have time to appear. These effects usually come on gradually. It may be that the underlying disease comes under control, so that the dosage of the tranquillizer can be reduced and then administration stopped before these effects become serious. If there is poor renal function, accumulation of the drug may occur earlier. A smaller dose may be sufficient but

close attention is essential so it can be reduced as and when necessary.[3]

Assisting recovery

An old person may require a long time to recover normal mental function even after an acute infection or toxic condition, and certainly after a head injury or stroke. It is essential that the staff encourage recovery by allowing and enhancing return of the patient's control over himself and his immediate environment. Such recovery of control requires that the person be informed and reminded of where he is, the date, how he came there, who is treating him, what the treatments are and what is expected of him. Decision-making must be returned to him, beginning with the menu, activities, bathing and sleeping, and progressing to decisions on treatment and discharge arrangements. It is essential that all staff be prepared to provide information (e.g., greeting him by name, and giving the day and date and their names) and to answer questions. The physician must explain to the patient and family what has happened and what to expect. He should inform them of the prognosis when the diagnosis is clear, and reassure them if full recovery is expected. Full recovery should not be ruled out in an old person merely because he has had a stroke or other condition with a long convalescence, but it does require a consistent, supportive, stimulating environment and a coordinated approach from all health professionals involved. If the patient already manifested impaired mental function, then recovery is more difficult, but improvement at least back to the earlier level of function is possible and should be attempted.

Prevention: understanding the psychologic competence of the elderly

An acute confusional breakdown of a person already in precarious psychologic balance can be due to an acute disease or toxic condition, or may be precipitated by social or environmental changes. By understanding the nature of the pre-existing condition and the home circumstances, the physician may be able to anticipate and prevent an emergency from occurring. It is important to encourage and support a person who is managing in the familiar setting of his home, and to prevent an avoidable upset or stress from disturbing the equilibrium. To achieve this the physician must understand the normal psychologic competence of the elderly in general and of his aged patient in particular.

It was previously thought that psychologic competence declined with age and that elderly people found it increasingly difficult to learn. In fact, the elderly can learn new information but require time to incorporate it into their previous knowledge. They find practical involvement a more effective mechanism for learning than the memorizing of theory. Learning depends in part on memory, but mental attitude, motivation, alertness, sensory function and general health[4] all have a bearing. Input of information depends on efficient sense organ function, particularly vision and hearing, and these should always be checked. The person must be able to be alert and pay attention and this ability will be impaired if he is drowsy from medications, excessively anxious or distracted, severely depressed, or simply unable to comprehend complex terminology. The reticular substance of the brain stem responds to sensory input by a general arousal effect on the brain, so a stimulating environment improves general alertness.[5]

Memory itself has two components — short-term and long-term. The short-term memory enables the person to retain information initially for immediate use (for example, a telephone number until it has been dialled) or to classify the information so that he can recall what it was about for a short period. It is then passed to the long-term memory if such retention is desired. Retention in the long-term memory is facilitated by repetition and by the importance of the information. Memory is a function of the hippocampus, thalamic nuclei, mammillary bodies and areas around the third ventricle.[6] The short-term memory can be tested by giving the patient information to be repeated immediately. Evaluation of long-term memory requires knowledge by the physician of the events recalled. Sometimes what seems to be the product of a remarkable memory for distant events turns out to be inaccurate or fabrication or a selection of items from an otherwise misty past.

Memory provides a file of previous encounters and ideas that gives a sense of time past and a frame in which to judge present experience. In addition to retention is required the ability to recall at will and to recognize the recollection in a historical perspective. Kral[7] has pointed out that the elderly may have difficulty in recalling material when it is wanted, and this is not unfamiliar also to students undergoing examinations, but he believes this difficulty has no ominous significance for mental or physical health.

The ability to recall discrete items that are similar or closely related does not decline with age but there seems in older people to be difficulty in recalling information according to less obvious relationships and in thinking in broader concepts.[8] This might be considered evidence for increasing rigidity of thought. However, Riegel[9] has contended that while development in maturity leads to the formation of concrete concepts it also produces an acceptance of inconsistency between those concepts. The older person may hold clear-cut ideas and require to be convinced before he will change them, but he may also be less certain that he is right, not because of a lack of self-assurance (though that may be present for other reasons) but because of an awareness of the complexity of life.

The physician must consider that the elderly person possesses a wealth of experience and a mode of life worked out over a long period. He may have achieved a dynamic equilibrium with the present that, if not ideal, at least provides some major satisfaction, so he may resist and resent any changes.

The development of a familiar routine in day-to-day activities is both reassuring and supportive. The familiarity of objects and events may obviate the necessity for making decisions or keeping track of events in the larger world. Whether a lack of stimulation in a life of routine causes loss of mental function is problematic, but it certainly can disguise the occurrence of such a loss. The old person in his home may appear to be fully competent to deal with life's vicissitudes, when in fact a progressive loss of brain tissue or function may have led to a precarious balance. The concerned physician therefore should not assume that an old person is mentally feeble merely because of his age, but on the other hand should not assume that all is well without enquiry. Surveys have shown that physicians may be aware of only about half of the elderly persons in their practices who have a psychiatric disorder.[10]

A few tests can be incorporated in ordinary conversation. Does the old person recognize his physician and his immediate family, and does he recall recent events and the date? Does he pay attention in conversation, answer appropriately and show reasonable judgement in his statements? Is he neat in appearance and does he look well nourished? Does he appear depressed or express anger, suspicion or depression in his thoughts? Such signs require analysis to establish a diagnosis. They are not simply a part of growing old.

Summary of treatment principles

Although at present there is no effective treatment for progressive dementia due to senile brain disease, cerebral infarction and other such degener-

ative conditions, it is important to identify and deal with subdural hematoma, myxedema, vitamin deficiency and severe depression. A confusional state may occur if the familiar surroundings or the routine is altered. The family should be encouraged to be supportive and to maintain frequent supervision. Community support may be mobilized by asking a neighbour to make frequent, regular contacts, and by involving a community nursing or social agency. The aim is to maintain equilibrium; therefore suggestions to give a forgetful old person a change, a holiday or an outing are to be discouraged.

An upset may be precipitated by acute illness in the old person, even a relatively minor one, or by an event in the family that disturbs him. The situation should be changed as little as possible, and often the old person will resist any change, so examination and treatment should be given in the home if possible. The confusion may clear and the person continue in the old routine. Information and guidance must be given to the family and neighbours, who may otherwise perceive this management as neglect. One must also ensure that decisions are made truly in the patient's interests and that if admission to hospital or another institution is decided on, it is not primarily to relieve the family of responsibility.

Long-term institutional care may finally be necessary for the person's safety and well-being. Most elderly persons referred for such care have impaired mental function recognized by their physician.[11] It has been shown that relocation of old people can be traumatic or fatal, especially if they are in frail health. Therefore an attempt should be made to inform the person and to obtain consent prior to such a move or admission to an institution. Most mentally impaired old people still have some memory function and can retain information that is simply stated and repeated. It may require repeated visits over a period and repeated, noninsistent reminding for the person to understand and accept the necessity to move.

Following admission it is essential that someone familiar and trusted be present to help the person adjust to the new environment. A sense of reassurance, interest and warmth should be conveyed by words and gestures. Information about the new location, the names of staff, the date and what is to be expected should be given. New approaches in management such as "reality orientation"[12] should be taught to all staff and used continuously on a 24-hour basis to enable the person to reestablish equilibrium and become involved in a daily program. Tranquillizing medication may be needed at first to allay anxiety and anger, and at night to promote quietness. The need for it must be reviewed at intervals and a trial without it may be justified.

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